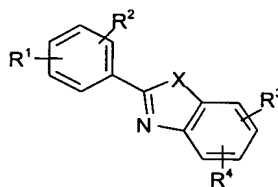


This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (currently amended) A compound of formula (I) or a pharmaceutically acceptable salt or prodrug thereof:

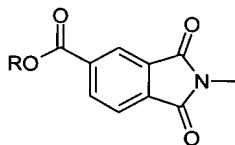


(I)

wherein

X is O or S;

R¹ is a phthalimide carboxylic acid group of formula (II):



(II)

R is hydrogen, C₁-C₆ alkyl, aryl or C₁-C₃ alkylaryl;

R² is hydrogen, halogen, C₁-C₆ alkyl, OR⁵, a 5-membered heteroaryl ring, or NR⁵R⁵ ~~wherein the R⁵ substituents together with the nitrogen to which they are attached may form a 5- or 6-membered ring which may contain an additional heteroatom selected from O, S, and NR¹⁰;~~

R³ and R⁴ are independently hydrogen, halogen, C₁-C₆ alkyl optionally substituted by hydroxy or C₁-C₃ alkoxy, CF₃, OCF₃, OR¹⁰, COR⁶, NHCOR⁷, NHSO₂R⁹, CN, S(O)_pR⁹, phenyl optionally substituted by one or more substituents selected from halogen, C₁-C₆ alkyl optionally substituted by hydroxy or C₁-C₃ alkoxy, CF₃, OCF₃, OR⁵, COR⁶, CN, CHO, OCHF₂, NR⁷R⁸, NHCOR⁷, NHSO₂R⁹, S(O)_pR⁹ and methylenedioxy, or a 5- to 10-membered heteroaryl ring which is optionally substituted by C₁-C₆ alkyl;

or R³ and R⁴ together may form a fused phenyl ring or a -O-(CH₂)_x-O- group, wherein x is 1 or 2;

R⁵ is independently hydrogen, C₃-C₆ alkenyl, C₃-C₆ alkynyl, or C₁-C₆ alkyl optionally substituted by hydroxy, C₁-C₃ alkoxy, NR⁷R⁸, phenyl or a 5- or 6-membered heteroaryl ring, wherein phenyl is optionally substituted by one or more substituents selected from halogen, CF₃, OCF₃, CHO, OR¹⁰, COR¹⁰, R¹⁰, CN and methylenedioxy and wherein the heteroaryl ring is optionally substituted by C₁-C₆ alkyl;

or R⁵ and R⁵, together with the nitrogen atom to which they are attached, form a 5- or 6-membered ring which optionally contains an additional heteroatom selected from O, S, and NR¹⁰.

R⁶ is C₁-C₆ alkyl, OR⁵, NR⁷R⁸ or phenyl optionally substituted by one or more substituents selected from halogen, C₁-C₆ alkyl optionally substituted by hydroxy or C₁-C₃ alkoxy, CF₃, OCF₃, OR⁵, COR¹⁰, CN, CHO, OCHF₂, NR⁷R⁸, NHCOR⁷, NHSO₂R⁹, S(O)_pR⁹ and methylenedioxy;

R⁷ and R⁸ are independently hydrogen, phenyl, a 5- to 10-membered heterocyclic ring, C₁-C₆ alkoxy, or C₁-C₆ alkyl optionally substituted by phenyl or a 5- to 10-membered heterocyclic ring, wherein in each case, the phenyl is optionally substituted by one or more substituents selected from halogen, CF₃, OCF₃, CHO, OR¹⁰, COR¹⁰, R¹⁰, CN and methylenedioxy and the heterocyclic ring is optionally substituted by C₁-C₆ alkyl;

or R⁷ and R⁸ together with the nitrogen to which they are attached ~~may~~ form a 5- or 6-membered heterocyclic ring which is optionally substituted by CONR¹⁰R¹⁰ and ~~may~~ optionally ~~contain~~ contains an additional heteroatom selected from O, S and NR¹¹;

R⁹ is C₁-C₆ alkyl or phenyl optionally substituted by one or more substituents selected from halogen, CF₃, OCF₃, CHO, OR¹⁰, COR¹⁰, R¹⁰, CN and methylenedioxy;

R¹⁰ is hydrogen, C₃-C₆ alkenyl, C₃-C₆ alkynyl, or C₁-C₆ alkyl optionally substituted by hydroxy or C₁-C₃ alkoxy;

R¹¹ is hydrogen, phenyl or C₁-C₃ alkyl optionally substituted by phenyl, wherein in each case the phenyl is optionally substituted by one or more substituents selected from halogen, CF₃, OCF₃, CHO, OR¹⁰, COR¹⁰, R¹⁰, CN and methylenedioxy; and

p is 0, 1 or 2;

provided that the compound is not 2-[4-(5-carboxy-1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)phenyl]-6-benzothiazolecarboxylic acid.

2. (original) A compound according to claim 1 wherein X is O.
3. (currently amended) A compound according to ~~claim 1 or 2~~ claim 1 wherein R¹ is meta to the benzoxazole or benzothiazole group.
4. (currently amended) A compound according to ~~any one of the preceding claims~~ claim 1 wherein R² is hydrogen, OR⁵ or NR⁵R⁵.
5. (currently amended) A compound according to ~~any one of the preceding claims~~ claim 1 wherein R³ is hydrogen or halogen.
6. (currently amended) A compound according to ~~any one of the preceding claims~~ claim 1 wherein R⁴ is hydrogen, halogen, C₁-C₆ alkyl optionally substituted by hydroxy or C₁-C₃ alkoxy, CF₃, OCF₃, OR¹⁰, COR⁶, phenyl optionally substituted by one or more substituents selected from halogen, C₁-C₆ alkyl optionally substituted by hydroxy or C₁-C₃ alkoxy, CF₃, OCF₃, OR⁵, COR⁶, CN, CHO, OCHF₂ and NR⁷R⁸₂, or a 5- to 10-membered heteroaryl ring which is optionally substituted by C₁-C₆ alkyl; or R³ and R⁴ together ~~may~~ form a fused phenyl ring.
7. (currently amended) A compound according to ~~any one of the preceding claims~~ claim 6 wherein R⁴ is COR⁶, phenyl optionally substituted by one or more substituents selected from halogen, C₁-C₆ alkyl optionally substituted by hydroxy or C₁-C₃ alkoxy, CF₃, OCF₃, OR⁵, COR⁶, CN, CHO, OCHF₂ and NR⁷R⁸₂, or a 5- to 10-membered heteroaryl ring which is optionally substituted by C₁-C₆ alkyl.
8. (currently amended) A compound according to ~~any one of the preceding claims~~ claim 1 wherein each R⁵ is, independently, hydrogen, C₃-C₆ alkenyl, C₃-C₆ alkynyl, or C₁-C₆ alkyl optionally substituted by hydroxy, C₁-C₃ alkoxy or a 5- or 6-membered heteroaryl ring, wherein the heteroaryl ring is optionally substituted by C₁-C₆ alkyl.

9. (currently amended) A compound according to ~~any one of the preceding claims~~ claim 1 wherein R⁶ is C₁-C₆ alkyl, OR⁵ or NR⁷R⁸.

10. (currently amended) A compound according to ~~any one of the preceding claims~~ claim 9 wherein R⁶ is OR⁵ or NR⁷R⁸.

11. (currently amended) A compound according to ~~any one of the preceding claims~~ claim 1 wherein R⁷ and R⁸ are independently hydrogen, or C₁-C₆ alkyl optionally substituted by phenyl or a 5- to 10-membered heterocyclic ring, wherein the phenyl is optionally substituted by one or more substituents selected from halogen, CF₃, OCF₃, CHO, OR¹⁰, COR¹⁰, R¹⁰, CN and methylenedioxy and the heterocyclic ring is optionally substituted by C₁-C₆ alkyl; or ~~still preferably~~ R⁷ and R⁸ together with the nitrogen to which they are attached ~~may~~ form a 5- or 6-membered heterocyclic ring which is optionally substituted by CONH₂ and ~~may~~ optionally ~~contain~~ contains an additional heteroatom selected from O, S and NR¹¹.

12. (currently amended) A compound according to ~~any one of the preceding claims~~ claim 1 wherein R⁹ is C₁-C₆ alkyl.

13. (currently amended) A compound ~~of formula (I) as described in any one of Examples 1 to 118~~ which is

2-[3-(Benzoxazol-2-yl)phenyl]-2,3-dihydro-1,3-dioxo-1H-isoindole-5-carboxylic acid;

2-[3-(Naphth[2,3-d]oxazol-2-yl)phenyl]-2,3-dihydro-1,3-dioxo-1H-isoindole-5-carboxylic acid;

2-[3-(6-Methylbenzoxazol-2-yl)phenyl]-2,3-dihydro-1,3-dioxo-1H-isoindole-5-carboxylic acid;

2-[3-(5-Chlorobenzoxazol-2-yl)phenyl]-2,3-dihydro-1,3-dioxo-1H-isoindole-5-carboxylic acid;

2-[3-(5-Phenylbenzoxazol-2-yl)phenyl]-2,3-dihydro-1,3-dioxo-1H-isoindole-5-carboxylic acid;

2-[2-Methoxy-5-(naphth[2,3-d]oxazol-2-yl)phenyl]-2,3-dihydro-1,3-dioxo-1H-isoindole-5-carboxylic acid;

2-[2-Methoxy-5-(6-methylbenzoxazol-2-yl)phenyl]-2,3-dihydro-1,3-dioxo-1H-isoindole-5-carboxylic acid;

2-[2-Methoxy-5-(5-chlorobenzoxazolyl)phenyl]-2,3-dihydro-1,3-dioxo-1H-isoindole-5-carboxylic acid;

2-[2-Methoxy-5-(5-phenylbenzoxazol-2-yl)phenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[2-Methoxy-5-(benzoxazol-2-yl)phenyl]-2,3-dihydro-1,3-dioxo-1H-isoindole-5-carboxylic acid;

2-[2-Chloro-(5-chlorobenzoxazol-2-yl)phenyl]-2,3-dihydro-1,3-dioxo-1H-isoindole-5-carboxylic acid;

2-[4-Chloro-(5-phenylbenzoxazol-2-yl)phenyl]-2,3-dihydro-1,3-dioxo-1H-isoindole-5-carboxylic acid;

2-[2-Methyl-5-(5-phenylbenzoxazol-2-yl)phenyl]-2,3-dihydro-1,3-dioxo-1H-isoindole-5-carboxylic acid;

2-[2-Methyl-5-(benzoxazol-2-yl)phenyl]-2,3-dihydro-1,3-dioxo-1H-isoindole-5-carboxylic acid;

2-[2-Methoxy-5-[5-(benzofuran-2-yl)benzoxazol-2-yl]phenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[2-Methoxy-5-[5-(3-acetyl)phenylbenzoxazol-2-yl]phenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[2-Methoxy-5-[5-(3,4-methylenedioxyphenyl)benzoxazol-2-yl]phenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[2-Methoxy-5-[5-(4-chlorophenyl)benzoxazol-2-yl]phenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[2-Methoxy-5-[5-(3,4-dimethoxy)phenylbenzoxazol-2-yl]phenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[2-Methoxy-5-[5-(2-methoxy)phenylbenzoxazol-2-yl]phenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[2-Methoxy-5-[5-(3,4-dichloro)phenylbenzoxazol-2-yl]phenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[2-Methoxy-5-[5-(3-chloro-4-fluoro)phenylbenzoxazol-2-yl]phenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[2-Methoxy-5-[5-(4-trifluoromethyl)phenylbenzoxazol-2-yl]phenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[2-Methoxy-5-[5-[4-(1-hydroxyethyl)]phenylbenzoxazol-2-yl]phenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[2-Methoxy-5-[5-(4-methyl)phenylbenzoxazol-2-yl]phenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[2-Methoxy-5-[5-[(5-methyl)thiophen-2-yl]benzoxazol-2-yl]phenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[2-Methoxy-5-[5-(4-methoxy)phenylbenzoxazol-2-yl]phenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[2-Methoxy-5-[5-(3-cyano)phenylbenzoxazol-2-yl]phenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[2-Methoxy-5-[5-(3-methyl)phenylbenzoxazol-2-yl]phenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[2-Methoxy-5-[5-(3-methoxy)phenylbenzoxazol-2-yl]phenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[2-Methoxy-5-[5-(3-fluoro)phenylbenzoxazol-2-yl]phenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[2-Methoxy-5-[5-(3-chloro)phenylbenzoxazol-2-yl]phenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[2-Methoxy-5-[5-(4-fluoro)phenylbenzoxazol-2-yl]phenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[2-Methoxy-5-[5-(2,4-difluoro)phenylbenzoxazol-2-yl]phenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[2-Methoxy-5-[5-(3,5-difluoro)phenylbenzoxazol-2-yl]phenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[2-Methoxy-5-[5-(4-trifluoromethoxy)phenylbenzoxazol-2-yl]phenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[2-Methoxy-5-[5-(4-trifluoromethoxy)phenylbenzoxazol-2-yl]phenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[2-Methoxy-5-[5-(2,4-dichloro)phenylbenzoxazol-2-yl]phenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[2-Propargyloxy-5-(5-phenylbenzoxazol-2-yl)phenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[2-Ethoxy-5-(5-phenylbenzoxazol-2-yl)phenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[2-(2-Methoxyethylamino)-5-(5-phenylbenzoxazol-2-yl)phenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[4-Methoxy-5-(5-phenylbenzoxazol-2-yl)phenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[4-Ethoxy-3-(5-phenylbenzoxazol-2-yl)phenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[4-(2-Methoxyethoxy)-3-(5-phenylbenzoxazol-2-yl)phenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[4-Butoxy-3-(5-phenylbenzoxazol-2-yl)phenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[4-Isopropoxy-3-(5-phenylbenzoxazol-2-yl)phenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[4-Allyloxy-3-(5-phenylbenzoxazol-2-yl)phenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[4-Hydroxy-3-(5-phenylbenzoxazol-2-yl)phenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[4-Propoxy-5-(5-phenylbenzoxazol-2-yl)phenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[2-(3-Furanylmethoxy)-5-(5-phenylbenzoxazol-2-yl)phenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[2-(2-Methoxyethoxy)-5-(5-phenylbenzoxazol-2-yl)phenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[5-(5-Phenylbenzoxazol-2-yl)-2-(3-tetrahydrofuranylmethoxy)phenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[5-(5-Phenylbenzoxazol-2-yl)-2-(3-thiophenylmethoxy)phenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[2-(4-Morpholinyl)-5-(5-phenylbenzoxazol-2-yl)phenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid, acetic acid salt;

2-[4-Ethylamino-3-(5-phenylbenzoxazol-2-yl)phenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[4-Propylamino-3-(5-phenylbenzoxazol-2-yl)phenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[4-(2-Methoxyethylamino)-3-(5-phenylbenzoxazol-2-yl)phenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[4-Morpholinyl-3-(5-phenylbenzoxazol-2-yl)phenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[4-Butylamino-3-(5-phenylbenzoxazol-2-yl)phenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[4-Hexylamino-3-(5-phenylbenzoxazol-2-yl)phenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[4-Pentylamino-3-(5-phenylbenzoxazol-2-yl)phenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-(3-Benzoxazol-2-yl-4-propylaminophenyl)-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-(3-Naphtho[2,3-d]oxazol-2-yl-4-propylaminophenyl)-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[3-(5-Chlorobenzoxazol-2-yl)-4-propylaminophenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[3-(6-Methylbenzoxazol-2-yl)-4-propylaminophenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[3-(6-Fluorobenzoxazol-2-yl)-4-propylaminophenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[3-(5-Bromobenzoxazol-2-yl)-4-propylaminophenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[3-(5-Methoxybenzoxazol-2-yl)-4-propylaminophenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[3-(5,7-Dichlorobenzoxazol-2-yl)-4-propylaminophenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[3-(5-Trifluoromethylbenzoxazol-2-yl)-4-propylaminophenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[3-(5-Bromo-7-fluorobenzoxazol-2-yl)-4-propylaminophenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[3-(5-Fluorobenzoxazol-2-yl)-4-propylaminophenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[3-(6,7-Difluorobenzoxazol-2-yl)-4-propylaminophenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[3-(5-Methylbenzoxazol-2-yl)-4-propylaminophenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[3-(4-Methylbenzoxazol-2-yl)-4-propylaminophenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[3-[6-(2-Tetrahydrofuranylmethylaminocarbonyl)benzoxazol-2-yl]phenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[3-[6-(4-Piperonylpiperazine-1-carbonyl)benzoxazol-2-yl]phenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[3-[6-(4-Piperazinoacetophenone-1-carbonyl)benzoxazol-2-yl]phenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[3-[6-(3-Trifluoromethylphenyl)piperazine-1-carbonyl]benzoxazol-2-yl]phenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[3-[6-(3-Carbamoylpiperidine-1-carbonyl)benzoxazol-2-yl]phenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[3-[6-(4-Methoxybenzylaminocarbonyl)benzoxazol-2-yl]phenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[3-[6-(3,4-Dimethoxybenzylaminocarbonyl)benzoxazol-2-yl]phenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[3-(5-Carboxy-1,3-dioxo-1,3-dihydroisoindol-2-yl)phenyl]benzoxazole-6-carboxylic acid;

2-[3-(5-Carboxy-1,3-dioxo-1,3-dihydroisoindol-2-yl)phenyl]benzoxazole-6-carboxylic acid methyl ester;

2-[3-(5-Carboxy-1,3-dioxo-1,3-dihydroisoindol-2-yl)phenyl]benzoxazole-7-carboxylic acid;

2-[3-(5-Benzyloxycarbonyl-1,3-dioxo-1,3-dihydro-isoindol-2-yl)phenyl]benzoxazole-6-carboxylic acid;

2-[3-(5-Methyloxycarbonyl-1,3-dioxo-1,3-dihydroisoindol-2-yl)phenyl]benzoxazole-6-carboxylic acid;

2-[5-(5-Bromobenzoxazol-2-yl)-2-methoxyphenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[5-(5-Phenylbenzoxazol-2-yl)-2-(3-thienyl)phenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[2-Fluoro-5-(5-phenylbenzoxazol-2-yl)phenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[2-Chloro-5-(5-phenylbenzoxazol-2-yl)phenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[2-Methoxy-5-[5-(2-benzothiophenyl)benzoxazol-2-yl]phenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[2-Methoxy-5-[5-(3-methyl-4-chlorophenyl)benzoxazol-2-yl]phenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[2-Methoxy-5-[5-(4-fluoro-3-formylphenyl)benzoxazol-2-yl]phenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[2-Methoxy-5-[5-(3,4-difluorophenyl)benzoxazol-2-yl]phenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[2-Methoxy-5-[5-(4-ethylsulfonylphenyl)benzoxazol-2-yl]phenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[2-Methoxy-5-[5-(4-N,N-dimethylaminophenyl)benzoxazol-2-yl]phenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[2-Methoxy-5-[5-(2,3-dichlorophenyl)benzoxazol-2-yl]phenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[4-Methoxy-5-[5-(2-benzothiophenyl)benzoxazol-2-yl]phenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[4-Methoxy-5-[5-(4-chlorophenyl)benzoxazol-2-yl]phenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[4-Methoxy-5-[5-(3-chloro-4-fluorophenyl)benzoxazol-2-yl]phenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[4-Methoxy-5-[5-(4-trifluoromethylphenyl)benzoxazol-2-yl]phenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[4-Methoxy-5-[5-(2-benzofuranyl)benzoxazol-2-yl]phenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[4-Methoxy-5-[5-(3,5-difluorophenyl)benzoxazol-2-yl]phenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[4-Methoxy-5-[5-(3,4-methylenedioxyphenyl)benzoxazol-2-yl]phenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[4-Methoxy-5-[5-(3-methoxy)phenylbenzoxazol-2-yl]phenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[4-Methoxy-5-[5-(4-methylphenyl)benzoxazol-2-yl]phenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[4-Propylamino-3-[5-(2-benzofuranyl)benzoxazol-2-yl]phenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[4-Propylamino-5-[5-(3,4-methylenedioxyphenyl)benzoxazol-2-yl]phenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[4-Propylamino-5-[5-(2-benzothiophenyl)benzoxazol-2-yl]phenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[4-Propylamino-5-[5-(3-methyl-4-chlorophenyl)benzoxazol-2-yl]phenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[4-Propylamino-5-[5-(4-chlorophenyl)benzoxazol-2-yl]phenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[4-Propylamino-5-[5-(3-chloro-4-fluoro)phenylbenzoxazol-2-yl]phenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[4-Propylamino-5-[5-(3,5-difluoro)phenylbenzoxazol-2-yl]phenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[4-Propylamino-5-[5-(4-fluorophenyl)benzoxazol-2-yl]phenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[4-Propylamino-5-[5-(4-trifluoromethoxy)phenylbenzoxazol-2-yl]phenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

2-[4-Propylamino-5-[5-(4-trifluoromethyl)phenylbenzoxazol-2-yl]phenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

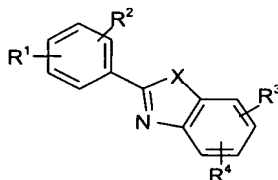
2-[4-Propylamino-5-[5-(3-chloro)phenylbenzoxazol-2-yl]phenyl]-1,3-dioxo-2,3-dihydro-1H-isoindole-5-carboxylic acid;

or a pharmaceutically acceptable salt or prodrug thereof.

14. (canceled)

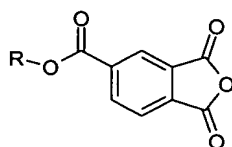
15. (currently amended) A process for the preparation of a compound as ~~defined in any one of claims 1 to 13~~ according to claim 1 which comprises:

a) ~~treating~~ heating a compound of formula (III):



(III)

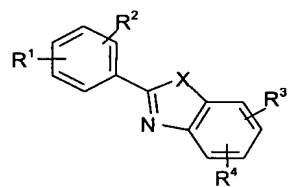
wherein R¹ is NH₂ or a protected derivative thereof ~~and X, R², R³ and R⁴ are as defined in claim 1~~, with a compound of formula (IV):



(IV)

~~wherein R is as defined in claim 1, by i) heating~~ in a suitable acidic medium, or
 ii) b) heating a compound of formula (III) with a compound of formula (IV) with an organic base in a suitable solvent, followed by heating in a suitable acidic medium.

16. (currently amended) A pharmaceutical composition comprising a compound ~~according to any one of claims 1 to 13, but without the proviso, of formula (I) or a pharmaceutically acceptable salt or prodrug thereof:~~

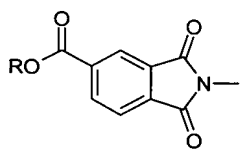


(I)

wherein

X is O or S;

R¹ is a phthalimide carboxylic acid group of formula (II):



(II)

R is hydrogen, C₁-C₆ alkyl, aryl or C₁-C₃ alkylaryl;

R² is hydrogen, halogen, C₁-C₆ alkyl, OR⁵, a 5-membered heteroaryl ring, or NR⁵R⁵;

R³ and R⁴ are independently hydrogen, halogen, C₁-C₆ alkyl optionally substituted by hydroxy or C₁-C₃ alkoxy, CF₃, OCF₃, OR¹⁰, COR⁶, NHCOR⁷, NHSO₂R⁹, CN, S(O)_pR⁹, phenyl optionally substituted by one or more substituents selected from halogen, C₁-C₆ alkyl optionally substituted by hydroxy or C₁-C₃ alkoxy, CF₃, OCF₃, OR⁵, COR⁶, CN, CHO,

OCHF₂, NR⁷R⁸, NHCOR⁷, NHSO₂R⁹, S(O)_pR⁹ and methylenedioxy, or a 5- to 10-membered heteroaryl ring which is optionally substituted by C₁-C₆ alkyl;

or R³ and R⁴ together form a fused phenyl ring or a -O-(CH₂)_x-O- group, wherein x is 1 or 2;

R⁵ is independently hydrogen, C₃-C₆ alkenyl, C₃-C₆ alkynyl, or C₁-C₆ alkyl optionally substituted by hydroxy, C₁-C₃ alkoxy, NR⁷R⁸, phenyl or a 5- or 6-membered heteroaryl ring, wherein phenyl is optionally substituted by one or more substituents selected from halogen, CF₃, OCF₃, CHO, OR¹⁰, COR¹⁰, R¹⁰, CN and methylenedioxy and wherein the heteroaryl ring is optionally substituted by C₁-C₆ alkyl;

or R⁵ and R⁵, together with the nitrogen atom to which they are attached, form a 5- or 6-membered ring which optionally contains an additional heteroatom selected from O, S, and NR¹⁰;

R⁶ is C₁-C₆ alkyl, OR⁵, NR⁷R⁸ or phenyl optionally substituted by one or more substituents selected from halogen, C₁-C₆ alkyl optionally substituted by hydroxy or C₁-C₃ alkoxy, CF₃, OCF₃, OR⁵, COR¹⁰, CN, CHO, OCHF₂, NR⁷R⁸, NHCOR⁷, NHSO₂R⁹, S(O)_pR⁹ and methylenedioxy;

R⁷ and R⁸ are independently hydrogen, phenyl, a 5- to 10-membered heterocyclic ring, C₁-C₆ alkoxy, or C₁-C₆ alkyl optionally substituted by phenyl or a 5- to 10-membered heterocyclic ring, wherein in each case, the phenyl is optionally substituted by one or more substituents selected from halogen, CF₃, OCF₃, CHO, OR¹⁰, COR¹⁰, R¹⁰, CN and methylenedioxy and the heterocyclic ring is optionally substituted by C₁-C₆ alkyl;

or R⁷ and R⁸ together with the nitrogen to which they are attached form a 5- or 6-membered heterocyclic ring which is optionally substituted by CONR¹⁰R¹⁰ and optionally contains an additional heteroatom selected from O, S and NR¹¹;

R⁹ is C₁-C₆ alkyl or phenyl optionally substituted by one or more substituents selected from halogen, CF₃, OCF₃, CHO, OR¹⁰, COR¹⁰, R¹⁰, CN and methylenedioxy;

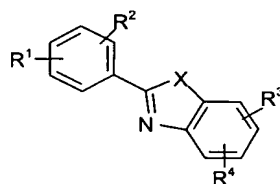
R¹⁰ is hydrogen, C₃-C₆ alkenyl, C₃-C₆ alkynyl, or C₁-C₆ alkyl optionally substituted by hydroxy or C₁-C₃ alkoxy;

R¹¹ is hydrogen, phenyl or C₁-C₃ alkyl optionally substituted by phenyl, wherein in each case the phenyl is optionally substituted by one or more substituents selected from halogen, CF₃, OCF₃, CHO, OR¹⁰, COR¹⁰, R¹⁰, CN and methylenedioxy; and

p is 0, 1 or 2,
~~together with~~ and a pharmaceutically acceptable carrier, excipient and/or diluent.

17-22. (canceled)

23. (new) A method for inhibiting heparanase activity in a patient suffering from a disease or disorder in which heparanase activity plays a role, comprising administering to the patient a pharmaceutically effective amount of a compound of formula I or a pharmaceutically acceptable salt or prodrug thereof:

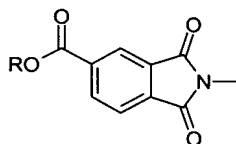


(I)

wherein

X is O or S;

R¹ is a phthalimide carboxylic acid group of formula (II):



(II)

R is hydrogen, C₁-C₆ alkyl, aryl or C₁-C₃ alkylaryl;

R² is hydrogen, halogen, C₁-C₆ alkyl, OR⁵, a 5-membered heteroaryl ring, or NR⁵R⁵;

R³ and R⁴ are independently hydrogen, halogen, C₁-C₆ alkyl optionally substituted by hydroxy or C₁-C₃ alkoxy, CF₃, OCF₃, OR¹⁰, COR⁶, NHCOR⁷, NHSO₂R⁹, CN, S(O)_pR⁹, phenyl optionally substituted by one or more substituents selected from halogen, C₁-C₆ alkyl optionally substituted by hydroxy or C₁-C₃ alkoxy, CF₃, OCF₃, OR⁵, COR⁶, CN, CHO, OCHF₂, NR⁷R⁸, NHCOR⁷, NHSO₂R⁹, S(O)_pR⁹ and methylenedioxy, or a 5- to 10-membered heteroaryl ring which is optionally substituted by C₁-C₆ alkyl;

or R³ and R⁴ together form a fused phenyl ring or a -O-(CH₂)_x-O- group, wherein x is 1 or 2;

R⁵ is independently hydrogen, C₃-C₆ alkenyl, C₃-C₆ alkynyl, or C₁-C₆ alkyl optionally substituted by hydroxy, C₁-C₃ alkoxy, NR⁷R⁸, phenyl or a 5- or 6-membered heteroaryl ring, wherein phenyl is optionally substituted by one or more substituents selected from halogen, CF₃, OCF₃, CHO, OR¹⁰, COR¹⁰, R¹⁰, CN and methylenedioxy and wherein the heteroaryl ring is optionally substituted by C₁-C₆ alkyl;

or R⁵ and R⁵, together with the nitrogen atom to which they are attached, form a 5- or 6-membered ring which optionally contains an additional heteroatom selected from O, S, and NR¹⁰;

R⁶ is C₁-C₆ alkyl, OR⁵, NR⁷R⁸ or phenyl optionally substituted by one or more substituents selected from halogen, C₁-C₆ alkyl optionally substituted by hydroxy or C₁-C₃ alkoxy, CF₃, OCF₃, OR⁵, COR¹⁰, CN, CHO, OCHF₂, NR⁷R⁸, NHCOR⁷, NHSO₂R⁹, S(O)_pR⁹ and methylenedioxy;

R⁷ and R⁸ are independently hydrogen, phenyl, a 5- to 10-membered heterocyclic ring, C₁-C₆ alkoxy, or C₁-C₆ alkyl optionally substituted by phenyl or a 5- to 10-membered heterocyclic ring, wherein in each case, the phenyl is optionally substituted by one or more substituents selected from halogen, CF₃, OCF₃, CHO, OR¹⁰, COR¹⁰, R¹⁰, CN and methylenedioxy and the heterocyclic ring is optionally substituted by C₁-C₆ alkyl;

or R⁷ and R⁸ together with the nitrogen to which they are attached form a 5- or 6-membered heterocyclic ring which is optionally substituted by CONR¹⁰R¹⁰ and optionally contains an additional heteroatom selected from O, S and NR¹¹;

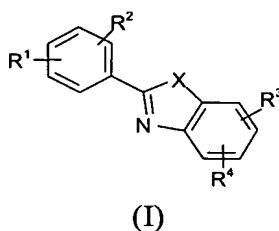
R⁹ is C₁-C₆ alkyl or phenyl optionally substituted by one or more substituents selected from halogen, CF₃, OCF₃, CHO, OR¹⁰, COR¹⁰, R¹⁰, CN and methylenedioxy;

R¹⁰ is hydrogen, C₃-C₆ alkenyl, C₃-C₆ alkynyl, or C₁-C₆ alkyl optionally substituted by hydroxy or C₁-C₃ alkoxy;

R¹¹ is hydrogen, phenyl or C₁-C₃ alkyl optionally substituted by phenyl, wherein in each case the phenyl is optionally substituted by one or more substituents selected from halogen, CF₃, OCF₃, CHO, OR¹⁰, COR¹⁰, R¹⁰, CN and methylenedioxy; and

p is 0, 1 or 2.

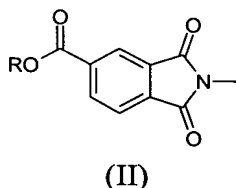
24. (new) A method for the treatment of cancer, angiogenesis, angiogenesis related disorders, inflammatory diseases, autoimmune disorders, cardiovascular diseases, or renal disorders comprising administering to a patient suffering from such a disease or disorder a pharmaceutically effective amount of a compound of formula I or a pharmaceutically acceptable salt or prodrug thereof:



wherein

X is O or S;

R¹ is a phthalimide carboxylic acid group of formula (II):



R is hydrogen, C₁-C₆ alkyl, aryl or C₁-C₃ alkylaryl;

R² is hydrogen, halogen, C₁-C₆ alkyl, OR⁵, a 5-membered heteroaryl ring, or NR⁵R⁵;

R³ and R⁴ are independently hydrogen, halogen, C₁-C₆ alkyl optionally substituted by hydroxy or C₁-C₃ alkoxy, CF₃, OCF₃, OR¹⁰, COR⁶, NHCOR⁷, NHSO₂R⁹, CN, S(O)_pR⁹, phenyl optionally substituted by one or more substituents selected from halogen, C₁-C₆ alkyl optionally substituted by hydroxy or C₁-C₃ alkoxy, CF₃, OCF₃, OR⁵, COR⁶, CN, CHO, OCHF₂, NR⁷R⁸, NHCOR⁷, NHSO₂R⁹, S(O)_pR⁹ and methylenedioxy, or a 5- to 10-membered heteroaryl ring which is optionally substituted by C₁-C₆ alkyl;

or R³ and R⁴ together form a fused phenyl ring or a -O-(CH₂)_x-O- group, wherein x is 1 or 2;

R⁵ is independently hydrogen, C₃-C₆ alkenyl, C₃-C₆ alkynyl, or C₁-C₆ alkyl optionally substituted by hydroxy, C₁-C₃ alkoxy, NR⁷R⁸, phenyl or a 5- or 6-membered heteroaryl ring, wherein phenyl is optionally substituted by one or more substituents selected from halogen,

CF₃, OCF₃, CHO, OR¹⁰, COR¹⁰, R¹⁰, CN and methylenedioxy and wherein the heteroaryl ring is optionally substituted by C₁-C₆ alkyl;

or R⁵ and R⁵, together with the nitrogen atom to which they are attached, form a 5- or 6-membered ring which optionally contains an additional heteroatom selected from O, S, and NR¹⁰;

R⁶ is C₁-C₆ alkyl, OR⁵, NR⁷R⁸ or phenyl optionally substituted by one or more substituents selected from halogen, C₁-C₆ alkyl optionally substituted by hydroxy or C₁-C₃ alkoxy, CF₃, OCF₃, OR⁵, COR¹⁰, CN, CHO, OCHF₂, NR⁷R⁸, NHCOR⁷, NHSO₂R⁹, S(O)_pR⁹ and methylenedioxy;

R⁷ and R⁸ are independently hydrogen, phenyl, a 5- to 10-membered heterocyclic ring, C₁-C₆ alkoxy, or C₁-C₆ alkyl optionally substituted by phenyl or a 5- to 10-membered heterocyclic ring, wherein in each case, the phenyl is optionally substituted by one or more substituents selected from halogen, CF₃, OCF₃, CHO, OR¹⁰, COR¹⁰, R¹⁰, CN and methylenedioxy and the heterocyclic ring is optionally substituted by C₁-C₆ alkyl;

or R⁷ and R⁸ together with the nitrogen to which they are attached form a 5- or 6-membered heterocyclic ring which is optionally substituted by CONR¹⁰R¹⁰ and optionally contains an additional heteroatom selected from O, S and NR¹¹;

R⁹ is C₁-C₆ alkyl or phenyl optionally substituted by one or more substituents selected from halogen, CF₃, OCF₃, CHO, OR¹⁰, COR¹⁰, R¹⁰, CN and methylenedioxy;

R¹⁰ is hydrogen, C₃-C₆ alkenyl, C₃-C₆ alkynyl, or C₁-C₆ alkyl optionally substituted by hydroxy or C₁-C₃ alkoxy;

R¹¹ is hydrogen, phenyl or C₁-C₃ alkyl optionally substituted by phenyl, wherein in each case the phenyl is optionally substituted by one or more substituents selected from halogen, CF₃, OCF₃, CHO, OR¹⁰, COR¹⁰, R¹⁰, CN and methylenedioxy; and

p is 0, 1 or 2.

25. (new) The method of claim 24 wherein the cancer is melanoma, mesothelioma, lymphoma, leukaemia, fibrosarcoma, rhabdomyosarcoma, mastocytoma, colorectal cancer, prostate cancer, small cell lung cancer, non-small cell lung cancer, breast cancer, pancreatic cancer, kidney cancer, liver cancer, stomach cancer, bladder cancer, skin cancer, uterine cancer, cervical cancer, or ovarian cancer.

26. (new) The method of claim 24 wherein the angiogenesis and angiogenesis related disorders are angiogenesis associated with the growth of solid tumors or retinopathy.
27. (new) The method of claim 24 wherein the inflammatory diseases are autoimmune disorders selected from the group consisting of rheumatoid arthritis, inflammatory bowel disease and multiple sclerosis.
28. (new) The method of claim 24 wherein the cardiovascular diseases are thromboembolic disease, arterial thrombosis or restenosis.
29. (new) The method of claim 24 wherein the renal disorders are renal disease associated with diabetes or nocturia.